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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|----------------|----------------------|-------------------------|-------------------------|--|
| 10/797,231 | 03/10/2004 | Richard Hammond | ASC-057C1 2980 | | |
| 51414 7 | 590 08/16/2005 | EXAMINER | | INER | |
| GOODWIN PROCTER LLP PATENT ADMINISTRATOR EXCHANGE PLACE BOSTON, MA 02109-2881 | | | GHYKA, ALEXANDER G | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2812 | TALLA NOMBER | |
| 2001011, 112 | . 02107 2001 | | 2012 | | |
| | | | DATE MAILED: 08/16/2005 | DATE MAILED: 08/16/2005 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|------------------------------|--|--|--|--|
| Office Action Comments | 10/797,231 | HAMMOND ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Alexander G. Ghyka | 2812 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | 1) Responsive to communication(s) filed on . | | | | | |
| | action is non-final. | | | | | |
| 3) Since this application is in condition for allowa | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>28-55</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdra | (a) Of the above claim(s) is/are withdrawn from consideration | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>28-55</u> is/are rejected. | POWARY EXAMPLE. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 6) Claim(s) 28-55 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers | | | | | | |
| <u> </u> | | | | | | |
| 9) The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 10 March 2004 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | _ | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary Paper No(s)/Mail D | | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | | Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28-55 are rejected under 35 U.S.C. 102(e) as being anticipated by WO 02/013262.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The present claims generally require a method of forming a semiconductor structure the method comprising providing a strained semiconductor layer; providing a SiGe layer over said strained semiconductor layer; and selectively removing the SiGe layer to expose the strained semiconductor layer.

WO 02/013262 disclose a relaxed SiGe layer on a substrate, a stained channel layer on the relaxed SiGe layer and a sacrificial SiGe layer. WO 02./013262 also

disclose the use of the sacrificial SiGe layer to form spacers, hence the selective removal of the SiGe layer as required by the present Claims 29-33. See the Abstract, page 3, lines 25-30, page 5, lines 10-30 and Figure 4B. In Figure 2A, WO 02/013262 discloses a heterostructure 200, which includes a Si substrate, a SiGe graded buffer, a relaxed SiGe layer 206, and a strained Si channel structure 208. See page 5, lines 10-25. WO 02/013262 further discloses the formation of a silicon oxide layer by oxidation. See page 13, Claims 29-30 and page 7, lines 20-20. Furthermore, WO 02/13262 disclose the formation of a buried channel MOSFET, page 8, lines 30-32, and discloses that the gate dielectric comprises an oxide. See column 14, Claim 42. Therefore, Claims 28-55 are anticipated by WO 02/013262.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander G. Ghyka whose telephone number is (571) 272-1669. The examiner can normally be reached on Monday through Thursday during general business hours..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on (571) 272-1873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Business Center (EBC) at 866-217-9197 (toll-free).

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

AGG August 14, 2005

> ALEXANDER GHYKA PRIMARY EXAMINER

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